A NEW NARCOMEDUSA FROM THE NORTH ATLANTIC.[1]

R. P. BIGELOW.

Late in the summer of 1899, the U. S. S. "Fish Hawk" of the Bureau of Fisheries made an expedition from Wood's Hole to the Gulf Stream. Upon her return I was handed a bottle containing a beautiful, clear, colorless medusa of considerable size, and was asked to identify it. The specimen was preserved in formalin and was in excellent condition. A short examination, however, was sufficient to prove it to be an unfamiliar form.

Fearing the deterioration of this unique specimen, I began at once in the Fisheries Laboratory at Woods Hole, as careful a study of its structure as could be made without destroying the specimen. Detailed, measured drawings were made, two of these being reproduced in the present article.

Unfortunately the otoliths were not visible, probably having been destroyed by the formalin, and the specimen appeared to be immature, as gonads were not distinctly marked. These circumstances made the identification difficult, and although the specimen appeared to belong to a new species, I hesitated to describe a new species from this single specimen. It was, therefore, put aside in the hope that another season might furnish material for a more complete diagnosis.

The material hoped for, however, has not appeared, and as my friend, Dr. A. G. Mayer, assures me that in all probability this is a new species of the genus Pegantha, I venture to publish the following description:

PEGANTHA CLARA, sp. nov.

General description. — Bell lenticular, doubly convex, 53 mm. wide, 20 mm. thick, exumbrella smooth, 28 equally spaced bell-lappets alternating with 28 tentacles; 14 of these tentacles are long, and range between 33 and 56 mm. in length, and they alter-

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nate with 14 smaller tentacles ranging in length from 11 to 35 mm. (The specimen in hand has only 27 tentacles, one of the smaller series having failed to develop.) The insertions of the long set of tentacles are farther upward (above the margin) and inward

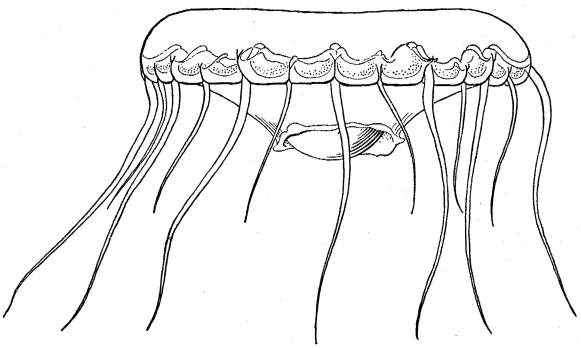

FIG. 1. *Pegantha clara*, side view. The tentacles are represented on one side only. Natural size.

(toward the center) than are the insertions of the short tentacles. The tentacles taper gradually to their pointed tips, and their entodermal cores are composed of a row of chordate cells.

The otolith-clubs appear to have been destroyed by the formalin in which the medusa is preserved; but there are 2–5, usually 3, long, slender, linear, somewhat tortuous, sensory tracts (otoporpæ) which extend from the bell-margin about one half the distance up the exumbrellar side of each lappet.

The velum is simple, annular, and provided with powerful cir-

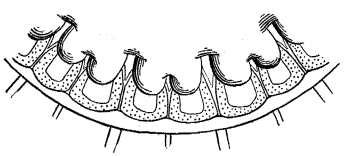

FIG. 2. A portion of the margin of the subumbrella with the velum pressed out flat, and showing gastric pouches, festoon canal, and the transparent bases of the tentacles between them. Natural size.

cular muscles. The mouth is a simple annular opening at the thick lenticular center of the subumbrella.

At the margin of the stomach are 28 simple, unilobular saccules which project downward into the bell-cavity, one in each

antimere. These bag-like protrusions thus alternate with the radii of the tentacles, and they contain the genital organs, the specimen being a male. The marginal ring canal, or "festoon canal," is very wide. It extends down the sides of the peronial strand on either side of the insertion of each tentacle, and along the margin of each lappet. It is thus broken up into 28 loops, one in each antimere.

The gelatinous substance of the bell is hyaline. The tentacles, gonads, stomach, and festoon canal are milky — slightly brown in formalin.

The medusa upon which this description is based is probably immature; for one half of its tentacles are of small size, and belong apparently to a set that is in process of development.

Locality. — North Atlantic, U. S. S. "Fish Hawk" Station No. 7068, near the border of the Gulf Stream, off the southern coast of New England.